DOCUMENT RESUME

ED 412 075 SE 060 557

AUTHOR Wagner, Elaine
TITLE Environmental Attitudes in the Elementary Grades: A Bibliographic Essay.
PUB DATE 1997-00-00
NOTE 15p.
PUB TYPE Reference Materials - Bibliographies (131)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Activism; Elementary Education; *Environmental Education; Field Trips; Foreign Countries; *Futures (of Society); Group Activities; Natural Resources; Pollution; Science Fairs; Science Instruction; *Student Attitudes; Teacher Attitudes; Urban Youth; Values
IDENTIFIERS *Environmental Awareness; *Environmental Ethic; Forests; Nature

ABSTRACT

Ecological or environmental programs integrated into science courses in the elementary grades can make children aware that they can have either a positive or a negative effect on their environment. The following bibliography was compiled from articles and dissertations on environmental education and children's awareness, attitudes, and perceptions of the natural environment. Citations were retrieved from searches of Ecology Abstracts, ERIC, Dissertation Abstracts, General Science Index, and PsycLIT using online or CD-ROM databases. Topics covered include curriculum development, promoting ecological awareness in young children, development of tests for environmental attitudes, summer nature camps, learning opportunities in nearby natural resource areas, field trips to public gardens, children's experiences with vegetation on school grounds, inner-city attitudes, rural attitudes, and waste management. Contains 67 references. (PVD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 412 075

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
E. Wagner
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Environmental Attitudes in the Elementary Grades: A Bibliographic Essay

by
Elaine Wagner

SE060557

BEST COPY AVAILABLE

ENVIRONMENTAL ATTITUDES IN THE ELEMENTARY GRADES: A BIBLIOGRAPHIC ESSAY

Elaine Wagner
Reference Dept.
Woodruff Library
Emory University

Ecological or environmental programs integrated into science courses in the elementary grades can make children aware that they can have either a positive or negative effect on their environment. Environmental awareness, concern, knowledge, and responsibility should be among the goals of early childhood education. Richard Peters suggests that an integrated curriculum of the natural and social sciences would help children acquire a social ethic that develops their awareness of the natural and social worlds around them. (Peters 1993-94) "Teachers who recognize the need for environmental education often infuse study about the environment into traditional course offerings. Many environmental educators feel that this is the best way to teach about environmental issues." (Alliance for Environmental Education 1993, p.16)

The attitudes and interests of teachers and parents affect children's perceptions of ecological issues. Classroom instruction complemented by field trips to nature centers, forest preserves, and other natural resource areas motivate children to practice environmentally responsive behavior. (Simmons 1993) Ecological experiments and science fair projects provide opportunities for parents to become involved, and recycling and other conservation efforts in the home teach children that they can have a personal impact on their environment.

T. Tanner found that childhood experience of the outdoors is the single most important factor in developing personal concern for the

ED360557

environment. (Tanner 1980) These findings were reinforced by the research of Joy Palmer using a larger sample and subjects from different continents. (Palmer 1993)

The following bibliography was compiled from articles and dissertations on environmental education and children's awareness, attitudes, and perceptions toward the natural environment. Citations were retrieved from searches of Ecology Abstracts, ERIC, Dissertation Abstracts, General Science Index, and PsycLIT using online or CD-ROM databases.

Aho, Leena (1984). "Man and Nature: Cognitive and Emotional Elements in the Views of Twelve-year-old Schoolchildren." Scandinavian Journal of Educational Research, 28 (4), 169-186.

Al-Madhagi, Ahmed Alwan. (1987). Development of a K-12 Environmental Education Program and an Evaluation Instrument to Measure Environmental Education Knowledge and Attitudes of Yemen Arab Republic High School Students (Doctoral Dissertation, Kansas State University, 1987). Dissertation Abstracts International, 49-03A:0415.

Armstrong, James B. & Impara, James C. (1990). "The Effects of Order of Test Administration on Environmental Attitudes." Journal of Environmental Education, 21 (3), 37-39.

Armstrong, James B. & Impara, Janes C. (1991). "The Impact of an Environmental Education Program on Knowledge and Attitude." Journal of Environmental Education, 22 (4), 36-40.

BEST COPY AVAILABLE

Brown-Allen, Barbara Pearl. (1991). The Development of the Test for the Environmental Attitudes of Children (Environmental Education) (Doctoral Dissertation, Wayne State University, 1991). Dissertation Abstracts International, 52-12A:4200.

Caduto, Michael. (1983). "A Review of Environmental Values Education." Journal of Environmental Education, 14 (3), 13-21.

Chaib, Mohamed. (1988). "Environmental Education In Sparsely Populated Areas: Conflicting Attitudes In Student's Conception of Environmental Issues." Pedagogiska Rapporter, n22. (ERIC Document Service Reproduction No. ED316360)

Chin, Jack. (1985). The Development Of An Instrument For Evaluating The Effects Of An Environmental Education Program On Young Children's Attitudes: A Pilot Study. Masters Thesis, Stanford University. (ERIC Document Service Reproduction No. ED257683)

Cohen, Stewart & Horn-Wingerd, Diane M. (1993). "Children and the Environment: Ecological Awareness among Preschool Children." Environment and Behavior, 25 (1), 103-120.

Cohen, Stewart and Trostle, Susan L. (1990). This Land is Our Land: Promoting Ecological Awareness in Young Children." Childhood Education, 66 (5), 304-310.

Corral-Verdugo, Victor. (1993). "The Effect Of Examples And Gender On Third Graders' Ability To Distinguish Environmental Facts From Opinions." Journal of Environmental Education, 24 (4), 26-28.

Cross, Susan and Willis, Patrick. (1994). Watersheds, Wetlands, Forests, Streams: Learning Oportunities Next Door Linking Schools with Natural Resource Areas. Jackson Bottoms Wetlands Preserve, Hillsboro, OR. (Eric Document Reproduction Service No. ED395800)

Curriculum Development Centre, Canberra (Australia). (1981) Environmental Education: A Sourcebook for Primary Education. (ERIC Document Rerproduction Service No. ED236086)

Dickey, Elizabeth Josephine. (1994). The Effects of a Wildlife Conservation Course on the Knowledge and Attitudes of Gifted Upper Elementary Students (Masters Thesis, California State University, Fullerton, 1994). Masters Abstracts International 33-02:0328.

Disinger, John F. (1986). Current Research in Environmental Education. ERIC/SMEAC Environmental Education Digest No.1, 1986 (ERIC Document Reproduction Service No. ED274557)

Dresner, M. and Gill, M. (1994). "Environmental Education at Summer Nature Camp." Journal of Environmental Education, 25 (3), 35-41.

Eagles, P.F.J. and Muffitt, S. (1990). "An Analysis of Chldren's Attitudes Toward Animals." Journal of Environmental Education, 21 (3), 41-44.

Estes, Yvonne B. (1993). "Environmental Education: Bringing Children and Nature Together." (Kappan Special Report) Phi Delta Kappan, 74 (9), K1-K12.

Farmer, Augustus J. and Wott, John A. (1995). "Field Trips and Follow-up Activities: Fourth Graders in a Public Garden". Journal of Environmental Education, 27 (1), 33-35.

Fong, Ting-Ya. (1994). Environmental Awareness and Action at Elementary Schools in Taiwan, the Republic of China (Doctoral Dissertation, University of Denver, 1994). Dissertation Abstracts International, 54-11A:4052.

Fortner, Rosanne W. and Mayer, Victor J. (1991) "Repeated Measures Of Students' Marine And Great Lakes Awareness." Journal of Environmental Education, 23(1), 30-35.

Gomes dos Santos, M. (1994). "Nature and Pollution: Biased Perceptions of School Children from the Periphery of Belo Horizonte, Minas Gerais State," Ciencia e Cultura, 46 (3), 185-188.

Gutierrez de White, Teresa and Jacobson, Susan K. (1994) "Evaluating Conservation Education Programs at a South American Zoo." Journal of Environmental Education, 25 (4), 18-22.

Harvey, Margarete R. (1990). "The Relationship Between Children's Experiences With Vegetation On School Grounds And Their Environmental Attitudes." Journal of Environmental Education, 21 (2), 9-15.

Heath, Debra Lee. (1996). Fifth-Grade Students' Attitudes Toward the Environment (Masters Thesis, Texas Woman's University, 1996). Masters Abstracts International 35-03:0628.

Hogan, Kathleen. Eco-Inquiry: A Guide to Ecological Learning Experiences for the Upper Elementary/Middle Grades. Institute of Ecosystem Studies, Millbrook, NY.(ERIC Document Reproduction Service No. ED400162)

Imeson, Jaeanne and Skamp, Keith R. (1995). "A Novel Use of Literature to Integrate Environmental Education with Social Studies." Social Studies, 86 (5), 2150220.

Jaus, Harold H. (1984). "The Development And Retention Of Environmental Attitudes In Elementary School Children." Journal of Environmental Education, 15 (3), 33-36.

Kahn, Peter H. Jr. and Friedman, Batya. (1995). "Environmental Views And Values of Children in An Inner-City Black Community." Child Development. 66(5), 403-417.

Keen, Meg. (1991). "The Effect of the Sunship Earth Program on Knowledge and Attitude Development." Journal of Environmental Education, 22 (3), 28-32.

Leeming, Frank C.; Dwyer, W.O.; Bracken, B.A. (1995). "Children's Environmental Attitude and Knowledge Scale: Construction and Validation." Journal of Environmental Education, 26 (3),22-31.

Leeming, Frank C. et al. (1993). "Outcome Research in Environmental Education: A Critical Review." Journal of Environmental Education, 24 (4), 8-21.

Lieblich, Suzanne, Ed. (1995). Understanding Our Environmental Challenge. Clear Water Challenge: A Role Play Activity. National Science Teachers Association. (ERIC Document Reproduction Service No. ED392625)

"A Look at Children Who Read 'Ranger Rick'." (1984). Human Dimensions in Wildlife Newsletter, 3 (2), 1-7.

McRae, Keith. (1986). "Developing and Environmental Ethic in Outdoor Programs." Journal of Experiential Education, 9 (3), 31-35.

Malkus, Amy J. & Musser, Lynn M. (1993). Children and the New 3 Rs (Reduce, Reuse, Recycle): Attitudes Toward the Environment. Paper presented at the Biennial Meeting of the Society for Research in Child Development. (60th, New Orleans, LA, March 25-28, 1993) (ERIC Document Reproduction Service No. ED357865)

Mares, Cherry. (1978). "Environmental Awareness and Responsibility: An Innovatory Approach." Evaluation Quarterly, 2 (1), 91-105.

BEST COPY AVAILABLE

Margandant Van Arcken, Marjan. (1989). "Environmental Education, Children, And Animals." Anthrozoos, 3 (1), 14-19.

Meisner, Mark. (1993). "Wild Words: Nature, Language and Outdoor Education." Pathways: the Ontario Journal of Outdoor Education, 5 (5), 5-11.

Mendes, C.L.S. and Schall. V.T. (1995). "Knowledge of Forests and their Representation Among Urban Children. (Elementary School Children in the Municipality of Rio de Janeiro):Considerations about Environmental Education." Ciencias e Cultura (Sao Paulo), 47 (1-2), 32-37.

Milton, Barbara, Cleveland, Eliza, Bennet-Gates, Dianne. (1995). "Changing Perceptions of Nature, Self, and Others: A Report on a Park/School Program." Journal of Environmental Education, 2 (3), 32-39.

Musser, L.M. and Malkus, A.J. "The Children's Attitudes Toward the Environment Scale." Journal of Environmental Education, 25 (3), 22-26.

Nath, K. (19940. "Eco-clubs: A Scheme for Participation of Schoolchildren in Environmental Conservation." Environmental Conservation, 21 (1), 69-70.

Nelson, William A. (1996). Environmental Literacy and Residential Outdoor Education Programs (School Camps, Field Trips) (Doctoral Dissertation, University of La Verne, 1996). Dissertation Abstracts International, 57-10A:4314.

Nshubemuki. L. and Mugasha, A.G. (1986). "Conservation Attitudes of Schoolchildren in the Kondoa District of Tanzania." Environmental Conservation. 13 (2), 161-164.

Oberst, Mary Claire. (1997). A Quantitive and Qualitative Inquiry of the Impact of a Residential Environmental Education Program on Student Learning (Doctoral Dissertation , Ohio State University, 1997). Dissertation Abstracts International, 58-02A:0377.

Oldenski, Thomas E. (1991). "What On Earth Are We Doing With Environmental Ethics In Education?" Environmental Education and Information, 10 (2), 67-76.

Perry, Victoria. (1996). "Primary Naturalists Listen, Look, and Learn." Science and Children, 33 (8), 14-17.

Peters, Richard. (1993-94). "Issues in Education: Nuturing an Environmental and Social Ethic." Childhood Education. 70 (2), 72-73.

Plotkin, Rachel and Sheridan, Joe. (1995) "History and Personal Narratives in Outdoor Education." Pathways: The Ontario Journal of Outdoor Education, 7 (5), 10-13.

Riechard, Donald E. (1993). "Viewpoint. Risk Literacy: Is it the Missing Link in Environmental Education?" Journal of Environmental Education. 25 (1), 8-12.

Ryan, Chris. (1991). "The Effect of a Conservation Program on Schoolchildren's Attitudes Toward the Environment." Journal of Environmental Education, 22 (4), 30-35.

Shepard, Clinton L. and Speelman, Larry R. (1986). "Affecting Environmental Attitudes Through Outdoor Education." Journal of Environmental Education 17 (2) 20-23.

Simmons, Deborah A. (1994). "Urban Children's Preferences for Nature: Lessons for Environmental Education." Children's Environments, 11 (3), 194-203.

Stirling, Stella M. (1993). Children's Construction of Meaning in an Environmental Education Program (Masters Thesis, University of Alberta (Canada), 1993. Masters Abstracts International 32-02:0417.

Stone, James C. (1986). "Kids Learn Responsibility." Camping Magazine, 59 (1), 20-23.

Stoner, Darlene K., et al. (1993). Taking Action: An Educator's Guide to Involving Students in Environmental Action Projects. Western Regional Environmental Education Council. World Wildlife Fund. (Eric Document Reproduction Service No. ED393684)

Tyldesley, Peter. (1990). "Cross-Curricular Approaches Using Environmental Education." Environmental Education Bulletin, No. 3 (Nov.), 22-25.

Virginia State Dept. of Waste Management, Richmond. Div. of Litter and Recycling. (1990). Let's Waste Less Waste. Operation Waste Watch: Three New Rs for Elementary School. Grade 4. [Second Edition] (ERIC Document Reproduction Service No. ED347077)

Virginia State Dept. of Waste Management, Richmond. Div. of Litter and Recycling. (1990). Litter Pollution. Operation Waste Watch Three New Rs for Elementary School. Grade Two. [Second Edition] (ERIC Document Reproduction Service No. ED347075)

Virginia State Dept. of Waste Management, Richmond. Div. of Litter and Recycling. (1990). Natural and Man Made Objects. Operation Waste Watch: Three New Rs for Elementary School. Kindergarten. [Second Edition] ERIC Document Reproduction Service No. ED347073)

Virginia State Dept. of Waste Management, Richmond. Div. of Litter and Recycling. (1990). Trash Treasures. Operation Waste Watch: The New Three Rs for Elementary School. Grade 5. [Second Edition] (ERIC Document Reproduction Service No. ED347078)

Virginia State Dept. of Waste Management, Richmond. Div. of Litter and Recycling. (1990). Trash Trends. Operation Waste Watch: Three New Rs for Elementary School. Grade Three. [Second Edition] (ERIC Document Reproduction Service No. ED347076)

BEST COPY AVAILABLE

Virginia State Dept. of Waste Management, Richmond. Div. of Litter and Recycling. (1990). Waste out of Place. Operation Waste Watch: Three New Rs for Elementary School. Grade One. [Second Edition](ERIC Document Reproduction Service No. ED347074)

Wendling, Robert C. et al. (1989). "Effects of an Experiential Education Program on Rural Fifth-Graders." Journal of Rural and Small Schools, 3 (2), 43-47.

Wilson, Ruth A. (1993). "Educators for Earth" A Guide for Early Childhood Instruction." Journal of Environmental Education, 24 (2), 15-21.

Wojtowics, G. Greg. (1995). Health and Environmental Protection: A Survey of Student Attitudes. (ERIC Document Service Reproduction No. ED386447)

WORKS CITED

Alliance for Environmental Education. (1993). Education for the Earth: A Guide to Environmental Studies Programs. Princeton, NJ: Peterson's Guides.

Palmer, Joy A. (1993). "Development of Concern for the Environment and Formative Experiences of Educators." Journal of Environmental Education 24 (3) 26-30.

Peters, Richard. (1993-94). "Issues in Education: Nuturing an Environmental and Social Ethic." Childhood Education, 70 (2) 72-73.

Simmons, Deborah. (1993). "Facilitating Teachers' Use of Natural Areas: Perception of Environmental Education Opportunities." Journal of Environmental Education. 24 (3), 8-16.

Tanner. T. (1980). "Significant Life Experiences." Journal of Environmental Education, 11(4), 20-24.